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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/527,953

03/14/2005

Stefan Ziegler

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EXAMINER

O HERN, BRENT T

ART UNIT

PAPER NUMBER

1772

NOTIFICATION DATE

DELIVERY MODE

07/18/2007

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

docket-oppedahl@oppedahl.com

**Office Action Summary**

Application No.

10/527,953

Applicant(s)

ZIEGLER ET AL.

Examiner

Brent T. O'Hern

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 30 May 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-3 and 5-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 5-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 30 May 2007 has been entered.

### ***Claims***

2. Claims 1-3 and 5-19 are pending with claims 4 and 20 cancelled.

### **WITHDRAWN REJECTIONS**

3. The 35 U.S.C. 102 rejections of claims 3, 5-7, 10-11, 14 and 19 under 35 U.S.C. 102(b) as being anticipated by Kagi et al. (US 6,821,613) of record in the Office Action mailed 4 December 2006, page 3, paragraph 6 have been withdrawn due to Applicant's amendments in the Paper filed 30 May 2007.

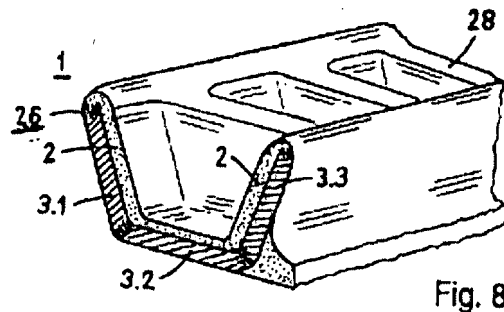
4. The 35 U.S.C. 103 rejections of claims 15-18 under 35 U.S.C. 103(a) as being obvious over Kagi et al. (US 6,821,613) of record in the Office Action mailed 4 December 2006, page 3, paragraph 7 have been withdrawn due to Applicant's amendments in the Paper filed 30 May 2007.

5. The 35 U.S.C. 102 rejections of claims 1-2, 8-9 and 12-13 under 35 U.S.C. 102(b) as being anticipated by Kagi et al. (US 6,821,613) of record in the Office Action mailed 4 December 2006, page 4, paragraph 9 have been withdrawn due to Applicant's amendments in the Paper filed 30 May 2007.

**NEW REJECTIONS*****Claim Rejections - 35 USC § 102***

6. Claims 1-3, 5-14 and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Kagi et al. (US 6,821,613).

Regarding claims 1-2, and 12, Kagi ('613) teaches a structural component made of long-fiber reinforced thermoplastic material with integrated continuous fiber-reinforcements (See col. 1, ll. 5-6, 29-34, col. 4, ll. 4-8 and FIG-8, #1.), the component comprising



at least three separate, single individually integrated, shaped continuous fiber profiles, which are separated from each other (See FIG-8 and col. 5, ll. 13-19 wherein the profiles are separated by the interfaces at the left and right ends of #3.2. Furthermore, the Examiner interprets separated to include profiles that are connected.);

the at least three single continuous-fiber profiles extending into different directions and running together at a location (See FIG-8 wherein #3.1 extends upward, slanting to the left and #3.3 extends upward slanting to the right and #3.2 extends horizontally.);

the at least three single continuous-fiber profiles, at the location where they run together, defining a three-dimensionally developed intersection point (See FIG-8

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*wherein the profiles run together and form a three-dimensionally developed intersection point.);*

wherein at the intersection point at least a first continuous-fiber profile lies in an upper plane of the intersection point, at least a second continuous-fiber profile lies a lower plane of the intersection point, and wherein at least a third continuous-fiber profile with a vertical orientation is located between the first and second continuous-fiber profiles (*See FIG-8 wherein #3.2 is vertical and 3.1 and 3.3 lie in upper/lower planes, respectively, when #1 is rotated by 90 degrees.*);

- wherein from the intersection point the first and the second continuous-fiber-profiles are extending into a first direction and the third continuous-fiber-profile is extending into a different second direction (*See FIG-8 wherein #3.1 and #3.3 extend in a lengthwise direction and #3.2 extends in a second thickness direction.*),

wherein the continuous-fiber profiles are joined together by the long-fiber-reinforced thermoplastic material at the intersection point (*See FIG-8, #2 and col. 5, ll. 13-19.*).

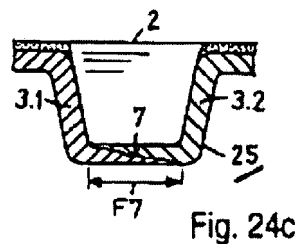
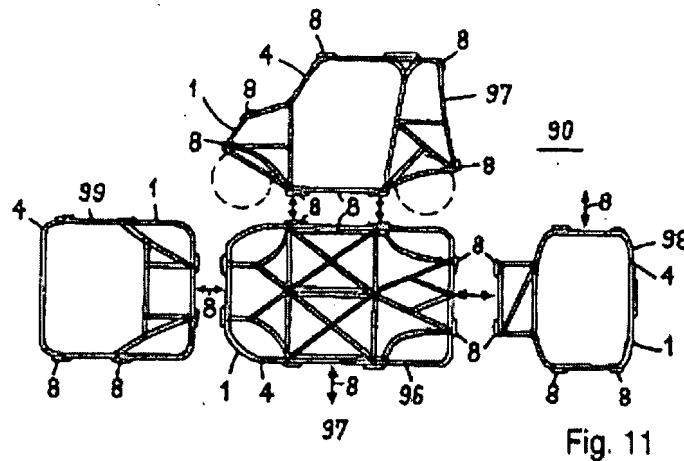
The phrase “**characterized in that shapes of the long-fiber-reinforced thermoplastic material, or shapes of the continuous-fiber profiles are forming points of introduction of external force**” in claim 2, lines 1-3 is deemed to be a statement with regard to the **intended use** and non-structural **functional language** and is not further limiting in so far as the structure is concerned (*See MPEP 2111.02*) and (*See MPEP 2173.05(g).*).

The phrase “**characterized in that continuous-fiber profiles are extending between points of introduction of external force**” in claim 12, lines 1-3 is not further

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limiting since Applicant is introducing non-structural **functional language** into the product claims (See *MPEP 2173.05(g)*).

Regarding claim 3, Kagi ('613) teaches a component characterised in that the three-dimensional intersection points are developed as "X"- "T"- or "L"-shaped (See *FIG-11, X and T-shaped and FIGs 8 and 24(c) L-shaped.*).



Regarding claim 5, Kagi ('613) teaches a component characterised in that the continuous-fiber- profiles are built up out of layers with differing fiber orientations (See *FIGs 8, 11, 23(a) and 24(c), layers.*).

Regarding claim 6, Kagi ('613) teaches a component characterised in that the long-fiber-reinforced thermoplastic mass comprises an average fiber length of at least 3 mm (See *col. 1, ll. 29-34.*).

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Regarding claim 7, Kagi ('613) teaches a component characterised in that the continuous-fiber profiles comprise a continuous fiber reinforcement made out of glass fibers (*See col. 4, l. 8.*).

Regarding claim 8, Kagi ('613) teaches a component characterised in that the thermoplastic material of the long-fiber-reinforced thermoplastic mass and of the continuous-fiber - profiles consists of partially crystalline polymers selected from the set consisting of polypropylene, polyethylene-terephthalate, polybutylene-terephthalate and polyamide (*See claim #7 of Kagi ('613)*).

Regarding claim 9, Kagi ('613) teaches a component characterised in that the continuous-fiber profiles comprise a three-dimensional profile shape (*See FIG-8, and col. 5, l. 13-19, a three-dimensional profile shape.*).

Regarding claim 10, Kagi ('613) teaches the component characterised in that the continuous- fiber profiles comprise a bend, a twist, a fold or a surface structuring in longitudinal direction (*See FIG-11, bends, twists and folds of structure*).

Regarding claim 11, Kagi ('613) teaches a component, characterised in that the continuous- fiber- profiles comprise differing cross-sectional shapes (*See FIGs 8, 14 and col. 9, ll. 40-63.*).

Regarding claim 13, Kagi ('613) teaches a component characterised in that a continuous- fiber - profile with a positioning shoulder, a tensile - and compressive force zone on top and underneath as well as a thrust zone in between is formed, which is positioned in a rib or in a crimp wall of the structural component, and wherein the tensile and compressive force zones are thicker than the thrust zone (*See various configurations and shapes in FIGs 8 and 24(c), and col. 9, ll. 40-63.*).

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Regarding claim 14, Kagi ('613) teaches a component characterised in that the continuous- fiber - profiles form a moment - load lever structure with a T-shaped or L-shaped three- dimensional intersection point (*FIGs 8, 24(c), 6b and 7, an L-shape and col. 11, l. 4.*).

Regarding claim 19, Kagi ('613) teaches a component characterised in that the structural component is assembled out of at least two parts welded together (*See col. 5, l. 37.*).

### ***Claim Rejections - 35 USC § 103***

7. Claims 15-18 are rejected under 35 U.S.C. 103(a), as being unpatentable over Kagi et al. (US 6,821,613).

Kagi ('613) teaches a component discussed above, however, fails to expressly disclose wherein the structural component forms a single seat back with a belt connection, two-thirds rear seat back with belt connection and lock, a seat shell or a cabin floor, or a supporting structure of a car door with integrated side-crash protection.

However, Kagi ('613) teaches that its structures are used for various vehicle structures such as safety belt anchor point elements in vehicle cabins, load bearing inserts and structural components, or chasis components (*See col. 4, ll. 55-61, col. 1, ll. 41-46 and FIGs 8, 15, 24(c) and 25.*) for the purpose of providing support for demanding load-bearing structural components (*col. 1, ll. 42-43*).

Therefore, it would have been obvious to one of ordinary skill in the art at the time applicant's invention was made that Kagi's ('613) elements for safety belt anchor points and load bearing body components would be used for the above seat backs/seat shell, with belt connection and lock and Kagi's ('613) chasis and load bearing body



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components would be used as a cabin floor or supporting structure of a car door with integrated side-crash protection.

### **ANSWERS TO APPLICANT'S ARGUMENTS**

8. In response to Applicant's argument (*p. 6, para. 6 to p. 7 para. 2 of Applicant's Paper filed 30 May 2007*) that Kagi ('613) does not disclose the structure of the amended claims and all connecting areas are flat, it is noted that Kagi ('613) does teach each of the limitations of the claimed structure of the amended claims as discussed above. Furthermore, Applicant does not claim a non-flat connecting area, thus Applicant's argument is not germane to any issue at bar.

9. In response to Applicant's argument (*p. 7, paras. 3-7 of Applicant's Paper filed 30 May 2007*) that Kagi ('613) does not teach amended claim #1, because Kagi ('613) only teaches one single combined profile, extending in one direction and the profiles are separated, it is noted as discussed above, that Kagi ('613) teaches at least three separate, single individually integrated, shaped continuous fiber profiles, which are separated from each other (*See FIG-8 and col. 5, ll. 13-19 wherein the profiles are separated by the interfaces at the left and right ends of #3.2. Furthermore, the Examiner interprets separated to include profiles that are connected.*) and the at least three single continuous-fiber profiles extending into different directions and running together at a location (*See FIG-8 wherein #3.1 extends upward slanting to the left and #3.3 extends upward slanting to the right and #3.2 extends horizontally.*).

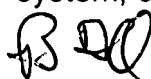
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### **Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brent T. O'Hern whose telephone number is (571) 272-0496. The examiner can normally be reached on M-Th, 9:00-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye can be reached on (571) 272-3186. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Brent T O'Hern  
Examiner  
Art Unit 1772  
July 10, 2007

  
NASSER AHMAD  
PRIMARY EXAMINER 7/11/07